DC/AC Standard Fuel Transfer Pumps

User's Manual



Model No. 10303001/ 10303002/10303003/10303004



Read carefully and understand all INSTRUCTIONS before operating.

Failure to follow the safety rules and other basic safety precautions may result in serious personal injury. Save these instructions in a safe place and on hand so that they can be read when required.

SAFETY INSTRUCTIONS

To ensure safe and efficient operation, it is essential to read and follow each of these warnings and precautions.

- 1. DO NOT smoke near pump or use pump near an open flame. Fire could result.
- 2. Disconnect power to pump before servicing pump.
- 3. Turn off the switch before connecting power.
- 4. Take motors needing service to an authorized repair shop or return to factory to maintain.
- 5. A filter should be used on pump outlet to ensure that no foreign material is transferred to fuel tank.
- 6. Tank or barrel should be anchored to prevent tipping in both the full and empty conditions.



WARNING

- Electrical wiring should be done a licensed electrician in compliance with local codes. Rigid
 conduit should be used and proper ground must be provided to avoid the possibility of
 electrical shock. Failure to comply with this warning could result in serious injury and/or loss
 of property.
- 2. This product should not be used for fluid transfer into aircraft. This product is not suited for use with fluids for human consumption or fluids containing water.
- 3. Extreme operating conditions with working cycles longer than 30 minutes can cause the motor temperature to rise, thus damaging the motor itself. Each 30-minute working cycle should always be followed by a 30-minute power-off cooling phase.

GENERAL DESCRIPTION

These products are positive displacement, rotary vane pumps. Depending on installation and viscosity, these pumps can deliver up to 8GPM or 30LPM. Their rugged design makes for a long life of dependability.

TECHNICAL INFORMATION

- Inlet: 2" male on tank adapter, 3/4" female on pump
- Outlet: 3/4" female for 8GPM/30LPM
- Built-in bypass valve.
- > Furnished with:
 - 13ft/4m delivery hose
 - 1pc steel suction pipe
 - 1pc Aluminum manual nozzle.
 - 2" Quick change coupling
- Electrical Specification

PUMP MODEL	ELECTRICAL POWER		CURRENT	Flow Rate
	Current	Voltage	Maximum (Amp)	(L/min /GPM)
10303001	DC	12	25	30/8
10303002	DC	24	20	30/8
10303003	AC	120	3.15	30/8
10303004	AC	230	3.15	30/8

OPERATING CONDITIONS

Temperature: min -20°C / max +60°C

Relative Humidity: max 90%

FLUID COMPATIBILITY

These products are compatible with the following fluids:

Diesel, Kerosene, Mineral Spirits

Do NOT use with other fluids without consulting manufacturer.

INSTALLATION INSTRUCTIONS

- 1. Tightly screw suction pipe into inlet coupling of pumping unit. Extend suction pipe into truck tank or barrel to within 3" of tank bottom.
- 2. Screw inlet coupling of pump into 2" tank or barrel opening. Inlet coupling must be completely and securely threaded into an undamaged tank or barrel bung.
- 3. During installation and maintenance, make sure that the electric supply lines are not live.
- 4. Always turn off the switch before supplying electrical power.
- 5. Check the correct rotation direction of the DC pump. If it is inverted, check the polarity of the connection cable.
 - a) RED cable: positive pole (+)
 - b) BLACK cable: negative pole (-)
- 6. Systems should be designed to require a minimum amount of suction lift. Maximum "equivalent feet of lift" is 8' for diesel fuel.
- 7. Tank or barrel must be properly vented. A water separator should be used for pumping diesel fuel.
- 8. Power to the unit should be supplied from a dedicated 30 amp circuit breaker. No other equipment should be powered from this breaker. If two pumps are supplied from one breaker, that breaker must be capable of handing the load of both motors.

PROBLEMS AND SOLUTIONS

Problem	Possible Cause	Corrective Action		
	Look of algebria pours	Check the electrical connections and		
	Lack of electric power	the safety systems		
The motor is not turning		Check for possible damage or		
The motor is not turning	Rotor jams	obstruction of the rotating		
		components.		
	Motor problems	Contact with the service department		
	Low level in the suction tank	Refill the tank		
	Foot valve blocked	Clean and/or replace the valve		
	Filter clogged	Clean the filter		
	Excessive suction pressure	Lower the pump with respect to the		
	Excessive suction pressure	Level		
	High loss of head in the circuit	Use shorter tubing or of greater		
	(working with the by-pass open)	Diameter		
	By-pass valve blocked	Dismantle the valve, clean and/or		
Low or no flow rate	by-pass valve blocked	replace it		
Low of no now rate	Air entering the pump or the	Check the seals of the connections		
	suction tubing			
	A narrowing in the suction	Use tubing suitable for working		
	Tubing	under suction pressure		
	Low rotation speed	Check the voltage at the pump.		
	Low rotation speed	Adjust the voltage and/or use		
		cables of greater cross-section		
	The suction tubing is resting on	Raise the tubing		
	the bottom of the tank			
	Cavitations occurring	Reduce suction pressure		
Increased pump noise	Irregular functioning of the	Dispense until the air is purged		
moreased pump noise	by-pass	from the circuit		
	Air present in the diesel fuel	Verify the suction connections		
Leakage from the pump	Seal damaged	Check and replace the mechanical		
body	Ocal damayed	seal		

Daily Use

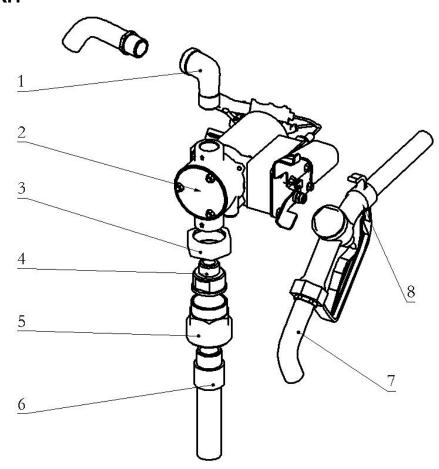
- If using flexible tubing, attach the ends of the tubing to the tanks. In the absence of an appropriate slot, solidly grasp the delivery tube before beginning dispensing.
- Before starting the pump make sure that the delivery valve is closed (dispensing nozzle or line valve).
- Turn the ON/OFF switch to ON. The by-pass valve allows functioning with the delivery closed for only brief periods.
- Open the delivery valve, solidly grasping the end of the tubing.
- Close the delivery valve to stop dispensing.
- When dispensing is finished, turn off the pump.

MAINTENANCE

Under normal working conditions the noise emission from all models does not exceed the value of 80 db at a distance of 1 meter from the electric pump.

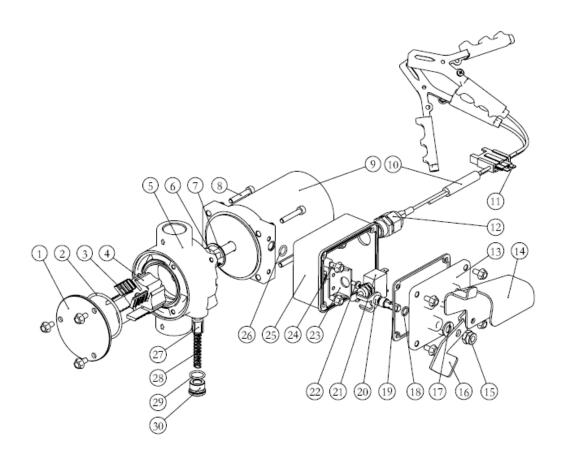
DIGRAM AND PARTS LIST

A. FOR KIT



Part No	Component Description	Quantity
1	90° Elbow	1
2	Fuel pump	1
3	Nut	1
4	Adapter	1
5	Tank Adapter	1
6	Extensible Pipe	1
7	4m Delivery hose	1
8	Manual nozzle	1

B. FOR SINGLE PUMP



No.	Description	Qty.	No.	Description	Qty.
1	Front cover	1	17	Washer	1
2	O-ring	1	18	O-ring	1
3	Blade		19	Seal	1
4	Rotor		20	Fork for turning switch	1
5	Pump chamber		21	Switch	1
6	Seals		22	Bolt	2
7	Spring collar	1	23	Switch bracket	1
8	Hex bolt	1	24	Hexagon flange bolts	11
9	Electric Motor	1	25	Junction box	1
10	DC Power cable with Fuse carrier	1	26	O-ring	1
11	Fuse	1	27	Valve	1
12	Cable clip	1	28	Spring	1
13	Junction box cover	1	29	O-ring	1
14	Nozzle holder	1	30	Sealed screw	1
15	nylon self-locking screw	1			
16	Switch connector	1			